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# AUTOMATIC CHEMICAL ANALYZING APPARATUS

Publication number: JP5099930

Publication date: 1993-04-23

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Classification:

- international: G01N21/59; G01N21/75; G01N35/00;  
 G01N35/02; G01N21/59; G01N21/75;  
 G01N35/00; G01N35/02; (IPC1-7):  
 G01N21/59; G01N21/75; G01N35/00;  
 G01N35/02

- european:

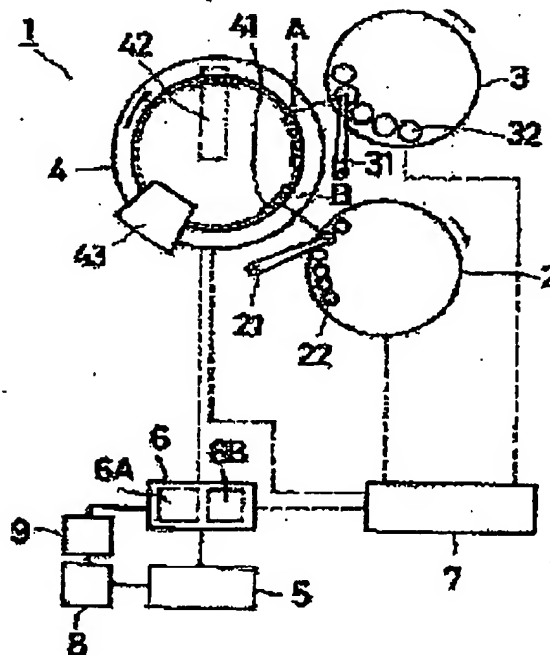
Application number: JP19910032396 19910131

Priority number(s): JP19910032396 19910131

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## Abstract of JP5099930

**PURPOSE:** To judge a specimen in need of re-examination quickly and to improve analyzing efficiency by providing a reaction-liquid adjusting part, an optical measuring part, a memory part, an operating part and two re-examination controlling parts for controlling the reaction- liquid adjusting part and the optical measuring part. **CONSTITUTION:** A re-examination controlling part 6 individually compares an absorbance  $A_i$ , which is measured at every constant time, with a limit value  $A_h$  and sends a control signal into a driver 7 so as to execute the re-examination for a specimen, whose amount is decreased when  $A_i > A_h$ . Even in the case of  $A_i \leq A_h$ , the computation of an anticipated value and the comparison of the anticipated value and the limit value  $A_h$  at this point are performed based on the data of a memory part 9 and a specified expression of relation. When the anticipated value is higher than  $A_h$ , a control part 6A starts the re-examination of the reduced amount by the same way. When the result of the comparison is not applicable to any of the above described cases, the anticipated value of the measured



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control part 6B. When the value exceeds a threshold value, the control signal is sent into the driver 7 so as to perform the ordinary re-examination. For the specimen, which does not require the re-examination for the reduced amount, an operating part 5 determines the quantity based on a specified calibration curve.

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Official Gazette of  
Unexamined Patent  
Publication No. 99930/1993

(19)日本国特許庁(JP)

(12)公開特許公報(A)

(11)特許出願公開番号

特開平5-99930

(43)公開日 平成5年(1993)4月23日

(51)Int.Cl. <sup>5</sup>	識別記号	片内整理番号	F I	技術表示箇所
G 0 1 N 35/00	A	8310-2 J		
21/59	Z	7370-2 J		
21/75	Z	7235-2 J		
35/02	J	8310-2 J		

審査請求 有 請求項の数 2 (全 8 頁)

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(54)【発明の名称】 自動化学分析装置

(57)【要約】

【目的】 光学的な自動化学分析装置における減量及び通常再検が必要な検体についてその判断をより迅速に行なって分析効率の向上を図る。

【構成】 減量再検及び通常再検の要否と、反応が終了する迄の光学濃度変動領域の光学濃度値及び対応する標準試料についての光学濃度値を利用して、リアルタイムに判断しその判断によってこれらの再検操作の指示を反応終了前に制御実行する。

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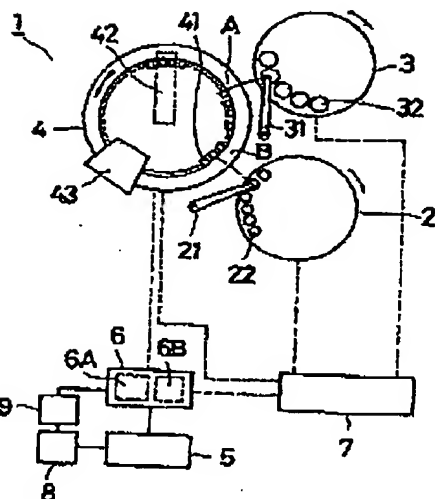
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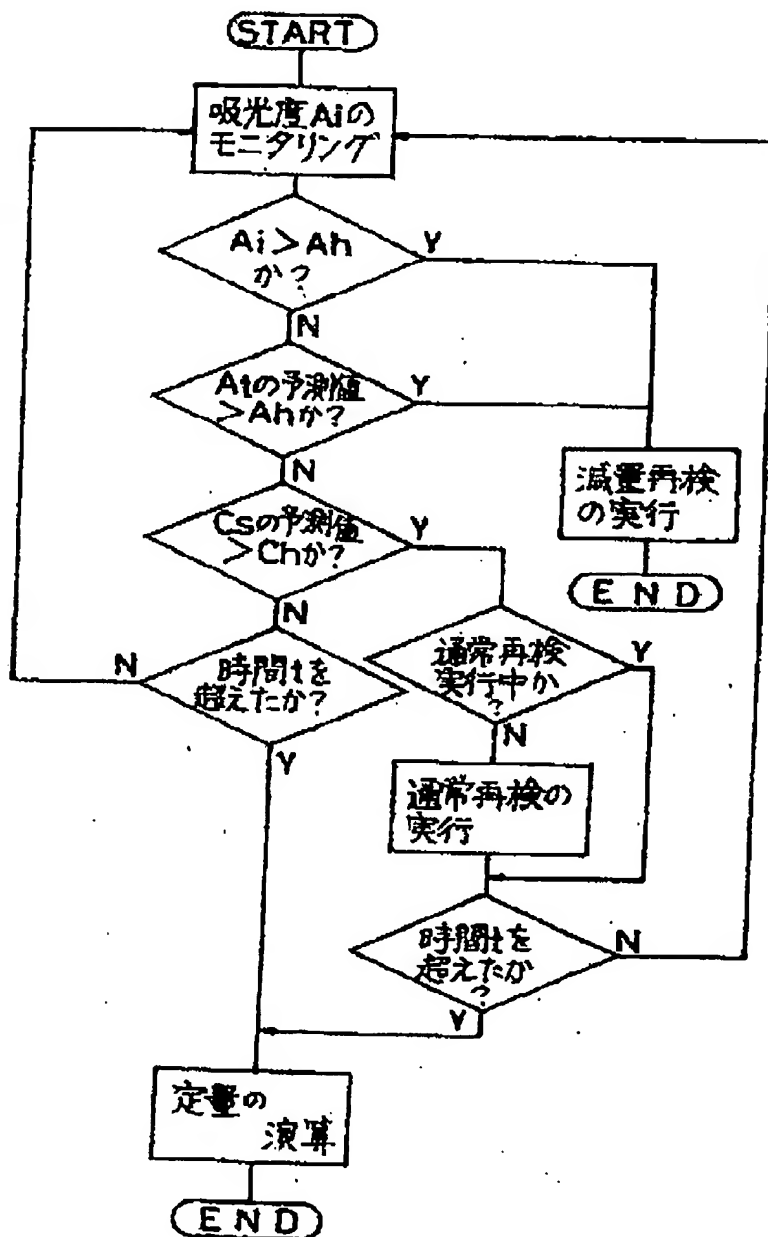
22 検体容器  
31 分注器  
32 試薬容器

\* 41 反応容器  
42 吸光度測定光学系  
\* 43 洗浄部

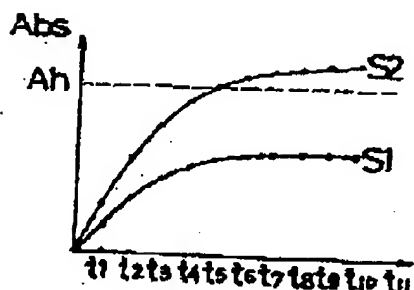
【図1】



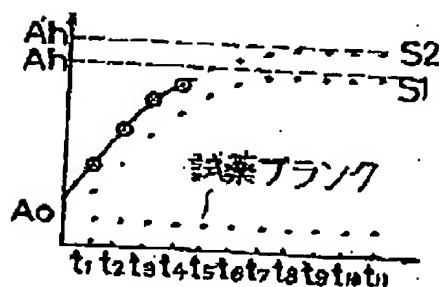
【図2】



【図4】



【図6】

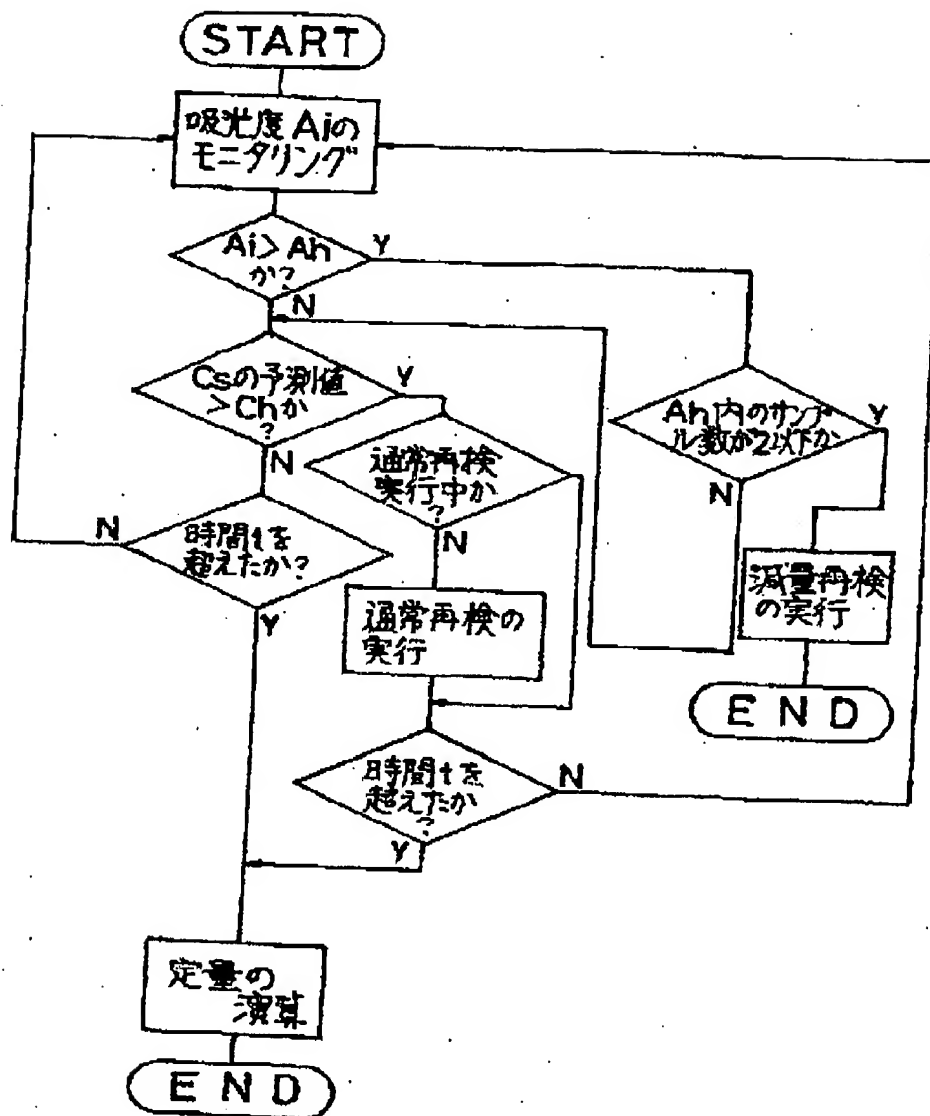


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【図3】

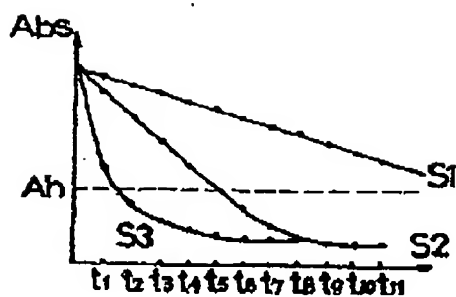


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【図5】



Translation in-part of Japanese Unexamined Patent  
Publication No. 99930/1993 (Reference 3)

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[0025]

[Embodiment]

The invention is further explained based on the following drawings. Fig.1 shows an automatic analyzer 1 of the embodiment. The automatic analyzer 1 has a structure which allows multiple analyses in order to select End point method or Rate method. The analyzer 1 basically comprises: an analyte sampling table 2 which distributes analyte from analyte container 22 to reaction container 41 by means of the distribution device 21; a reagent distribution table 3 which distributes a certain reaction reagent from reagent container 32 to reaction container 41 by means of the distribution device 31 (before this parenthesis are called reaction mixture preparing parts); optical measuring part 4; calculating part 5; re-examination controlling part 6 (first re-examination controlling part 6A and second re-examination controlling part 6B); and a memory 9. 7 is reaction mixture preparing parts and a driver of the optical measuring part 4. 8 is a display.

[0026]

The above mentioned optical measuring part 4 comprises a table which has many reaction containers 41 and turns them with a fixed cycle, absorptiometer system 42, and washing part 43 which can turn and the optical measuring part 4 has such a structure that it can monitor the absorbance of the mixture (reaction mixture) of analyte distributed at the distribution position B and reaction reagent

3 reagent distribution table

5	calculating part
6	re-examination controlling part
6A	first re-examination controlling part
6B	second re-examination controlling part
7	driver
8	display part
9	memory part
21	distribution device
22	analyte container
31	distribution device
32	reagent container
41	reaction container
42	absorptiometer optical system
43	washing part

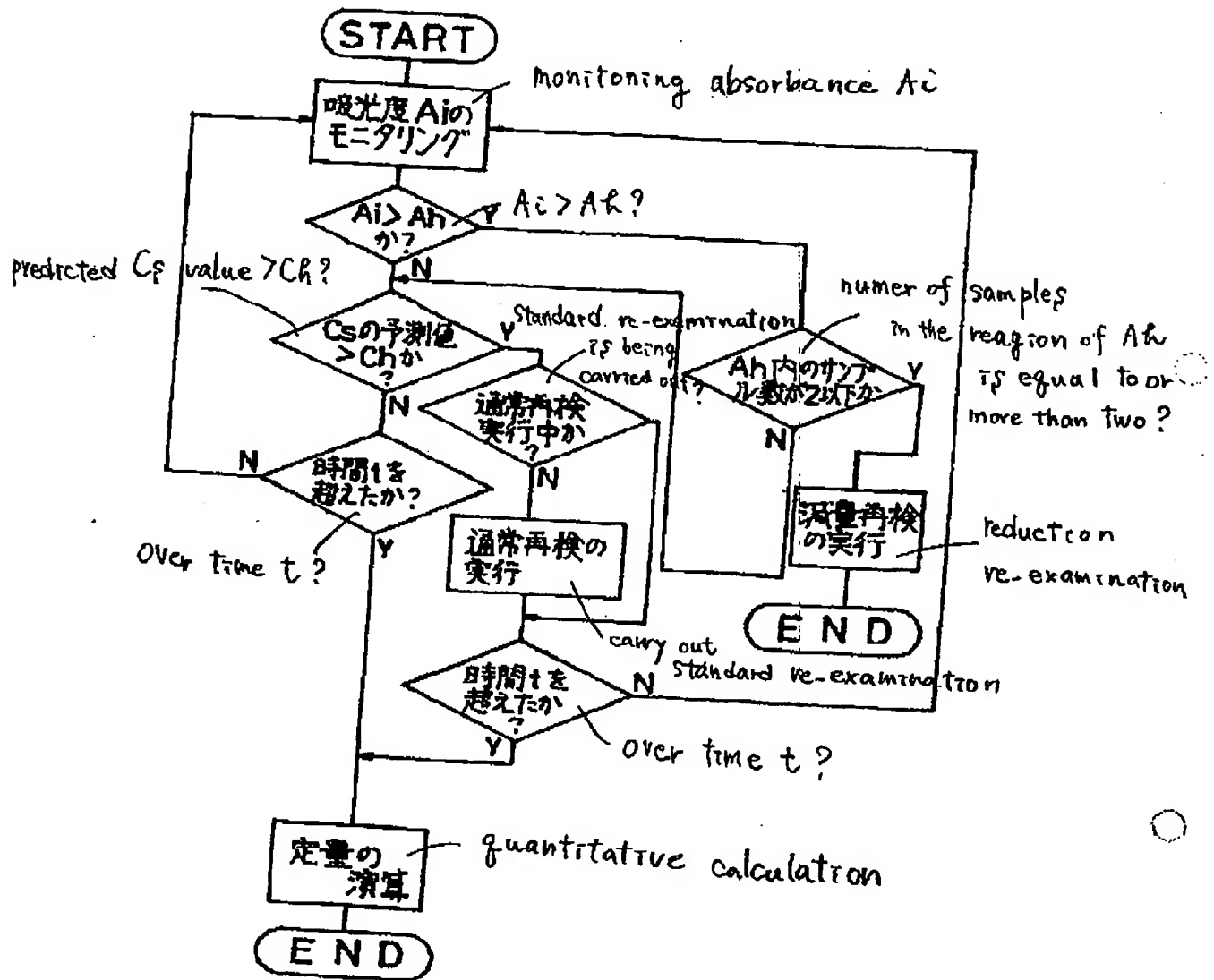




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【図3】



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【図5】

